

# A redescription of *Rissoina mayori* Dall, 1927, a junior subjective synonym of *Opalia pumilio* (Mörch, 1875) (Gastropoda: Epitoniidae)

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## ABSTRACT

An examination of the type material of *Rissoina mayori* Dall, 1927, confirmed that Ponder (1983) was correct in allocating the species to the family Epitoniidae. It is here redescribed and a lectotype is designated. Because of the similarity in shell characters and the overlap in geographic range, we consider *R. mayori* and *Opalia pumilio* (Mörch, 1875) to be synonyms.

*Additional Keywords:* New synonym, western Atlantic, Rissoidae

## INTRODUCTION

In 2015, Marien Faber, who has been researching the Rissoininae, contacted us regarding *Rissoina mayori* Dall, 1927. He was looking for our opinion on whether this species was referable to the Rissoininae as proposed by Dall, or to the Epitoniidae, as proposed by Ponder (1983: 90).

Neither Dall nor Ponder provided figures of the species, nor, apparently, has it been critically discussed or figured elsewhere in the literature. To resolve this question, we contacted Yolanda Villacampa and Dr. Ellen Strong at the Smithsonian Institution's National Museum of Natural History (USNM), requesting photographs of material of this species in the USNM type collection. They provided the scanning electron microscope (SEM) photographs reproduced here.

After reviewing the SEM photographs and the type material, it became apparent that Ponder was correct in his placement. This species indeed seems to belong to the Epitoniidae. Because this species has, to date, been overlooked in reviews of western Atlantic epitoniids, we herein redescribe and illustrate this species.

## SYSTEMATICS

Family Epitoniidae S. S. Berry, 1910

**Genus *Opalia* H. and A. Adams, 1853**

**Type Species:** *Scaloria australis* Lamarck, 1822, type of *Clathrus* Gray, 1842.

### *Opalia pumilio* (Mörch, 1875)

*Scala* (*Opalia*) *subvaricosa* var. *pumilio* Mörch, 1875: 268  
*Rissoina mayori* Dall, 1927 **new synonym** (Figures 1, 2, 3)

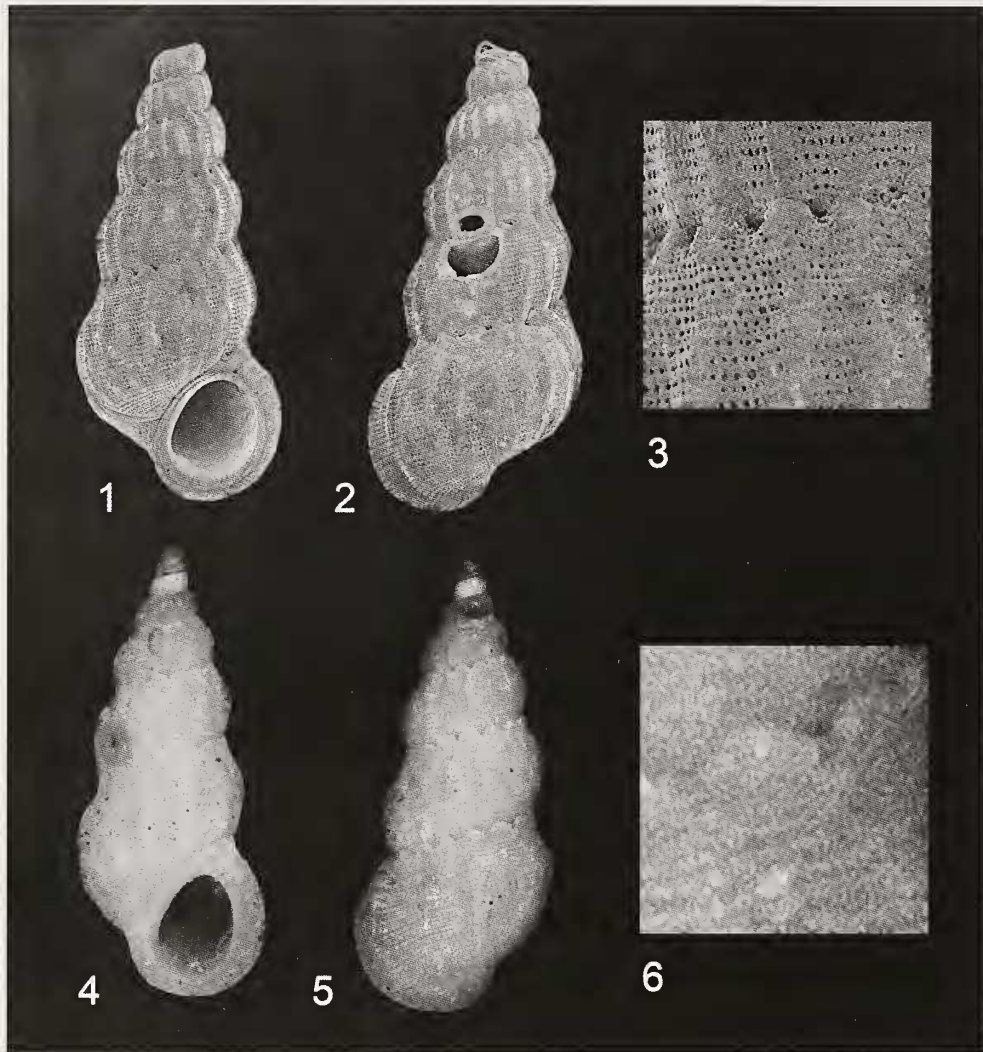
**Description of *Rissoina mayori*:** Lectotype (Figures 1, 2, 3) 4.2 mm in length (apex missing), 1.8 mm in diameter, imperforate and sculptured. Color white. Five+ convex teleoconch whorls; suture strongly crenulated, aperture obliquely ovate, outer lip thickened. Costae strong on the early whorls, but weaker on the rounded base of the body whorl; 15 costae on the body whorl, including one that is thickened and varix-like. Intervals with minute spiral striae, separated by rows of punctae. Operculum unknown.

**Type Material:** Lectotype of *Rissoina mayori* Dall, 1927, USNM 108371, here designated.

**Type Locality:** Off Georgia, 30°44' N, 79°26' W, 440 fms [= 805 m], ALBATROSS station 2415 (Dall 1927: 1, 105).

**Remarks:** Dall (1927: 105) referred to *Rissoina mayori* one specimen from Station 2415 which is due east of Cumberland Island, Georgia, as well as material collected off Miami in 58 fathoms. There is no indication on the label that Dall designated the specimen collected from Station 2415 to be the holotype. The material collected off Miami was not located in the USNM collection. (Y. Villacampa, personal comment, 15 April 2015). Therefore, we consider these specimens to be syntypes and are designating USNM 108371 to be the lectotype.

Because *Rissoina mayori* has crenulated sutures and a pitted intritacalx, we are referring this species to the genus *Opalia*. This is consistent with Bouchet and Warén (1986: 54), who referred to the genera *Gregorioiscala* Cossmann, 1912, and *Punctiscala* de



**Figures 1–6.** *Opalia* species. 1–3. *Rissoina mayori*, lectotype USNM 108371, 105 miles off Georgia, 30°44' N, 79°26' W, 805 m, ALBATROSS station 2415. 4–6. *Scala (Dentiscalia) hellenica nodosocarinata* Dall, 1889 [= *Opalia pumilio* (Mörch, 1875)], holotype USNM 82955, 5 miles off Cape Florida, Florida, 15 m, 3.9 mm.

Boury, 1890, species with non-crenulated sutures and a strong basal disk over which the costae do not extend and who referred to the genus *Opalia* species with crenulated sutures that may or may not have a basal disk.

Based on the material at hand, *Rissoina mayori* appears to be indistinguishable from *Opalia pumilio* (Mörch, 1875). The shell characters cited in Clench and Turner (1950: 238) for *O. pumilio* are certainly applicable to Dall's species. While the holotype of *Scala nodosocarinata* Dall, 1889 (a synonym of *O. pumilio* [Clench and Turner, 1950: 237]) (Figures 4, 5, 6) appears to differ from *R. mayori* in having finer pitting and raised ridges on the teleoconch whorls, it is not clear that these differences are taxonomically significant, given the fact that *O. pumilio* is "...an exceedingly variable species" (Clench and Turner, 1950: 238). Furthermore, the known range of *R.*

*mayori*, from Cumberland Is., Georgia, south to Miami, Florida, is well within the range of *O. pumilio*. In fact, the type locality for *Scala (Dentiscalia) nodosocarinata* Dall, 1889, is 5 miles off Cape Florida, Florida, a locality that could be considered to be Miami, Florida.

#### ACKNOWLEDGMENTS

We want to thank Marien Faber for bringing this problematic species to our attention. We also want to thank Dr. Ellen Strong and Ms. Yolanda Villacampa at the USNM for providing us with the photographs of the type material for *R. mayori* and *S. hellenica nodosocarinata* and for allowing us to examine the type material of these two species. We wish to thank Patrick Zinn at Texas A&M University for creating the plate.

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